

# PENETRON ARC

ACID-ACTIVATED COATING SPECIFICALLY DESIGNED FOR ANAEROBIC CONDITIONS

## DESCRIPTION

PENETRON ARC is an active mineral, protective coating specifically formulated for anaerobic conditions. PENETRON ARC is applied to concrete surfaces where anaerobic conditions exist and produce strong acids in the gas-zone. The strong acids, in particular Sulfuric Acid, chemically react with the PENETRON ARC to convert the coating into a dense acid resistant shell which will protect and prolong the life of the concrete substrate.

## APPLICATIONS

Sewage treatment facilities  
Precast sewage pipes  
Operations using mild Sulfuric Acid baths

## ADVANTAGES

Mild acids evolved in sewage and waste treatment increase the acid resistance abilities of PENETRON ARC.  
Provides protection from acids created during anaerobic or biogas activities.

## DIRECTIONS FOR USE

### Surface preparation:

All concrete to be treated with PENETRON ARC must be clean and have a minimum CSP (Concrete Surface Profile) of 3-4, meeting ACI standards. Remove laitance, dirt, grease, etc. by means of high-pressure water jetting, wet sandblasting or wire brushing. Faulty concrete in the form of cracks, honey-combing, etc. must be chased out and filled flush with a combination of PENETRON<sup>®</sup> and PENECRETE MORTAR<sup>™</sup>. Surfaces must be carefully watered to SSD (Saturated Surface Dry) prior to the application of PENETRON ARC. The concrete surface must be damp but with no wet sheen on the surface.

### Mixing:

Mechanically mix PENETRON ARC in a ratio of 18 kg (40 lb) of Part A (Powder) to 5.5 l (1.5 gal) of Part B (Liquid). Mix only as much as can be applied in 30 minutes.



Penetron ARC-20.07  
EN 1504-2  
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PENETRON ARC

Coating for Protection of Concrete Structures  
Resistance to Severe Chemical Attack:  
Class II (28 days without pressure) - ongoing  
Adhesion Strength by pull off test (where relevant):  $\geq 1.0$  MPa  
Reaction to fire: Class A1  
(pending determination of the organic content)  
Dangerous substances: No dangerous substances

## Application:

PENETRON ARC should be applied in 2 coats with the second coat of PENETRON ARC applied perpendicular to the first coat, while the first coat is still green, approximately 1-2 hours. One complete kit of Penetron Arc applied in 2 coats should have a total coverage of 11-12 m<sup>2</sup> (118.4 - 129.2 ft<sup>2</sup>). Due to the unique nature of the mineral components in PENETRON ARC, the second coat will chemically bond to the previous coat in the same way the first coat chemically bonds to the concrete substrate. Clean excess material from the brush in between batches of material. Due to the short pot-life of the product, use of a hopper gun, for the application is suggested.

**NOTE:** Frequently stir mixture during application.

## CLEAN UP

Clean all tools and equipment with clean water.

## SPECIAL CONSIDERATIONS

- Do not apply PENETRON ARC at or below freezing temperatures or to freezing surfaces.
- Protect surfaces treated with PENETRON ARC from direct sun, wind and freezing temperatures for at least 24 hours.
- Mix only as much PENETRON ARC as can be applied in 30 minutes. High temperatures will decrease this working time.
- When working with elevated temperatures, make sure material is stored in a cool area prior to application.

## PACKAGING

Part A (Powder): 18-kg (40-lb) bags.  
Part B (Liquid): 5.5-l (1.5-gal) pails.

## STORAGE/SHELF LIFE

PENETRON ARC must be stored in a cool and dry place, unexposed to moisture and sunlight at a minimum temperature of 7°C (45°F). Shelf life is one year when stored under proper conditions. Always tightly reseal PENETRON ARC Part B (Liquid) container after use and DO NOT ALLOW TO FREEZE!

## TECHNICAL SERVICES

For more detailed instructions, alternative application methods, or information concerning the compatibility of the PENETRON treatment with other products or technologies, contact the Penetron Technical Department or your local Penetron representative.

## SAFE HANDLING INFORMATION

Keep out of reach of children. Prolonged contact may be irritating to skin and eyes. If contact is made, flush areas with plenty of water and seek medical attention. Protective gloves, mask and goggles should be worn. Refer to SDS before handling this product.

**WARRANTY:** PENETRON INTERNATIONAL, LTD. warrants that the products manufactured by it shall be free from material defects and will conform to formulation standards and contain all components in their proper proportion. Should any of the products be proven defective, the liability to PENETRON INTERNATIONAL, LTD. shall be limited to replacement of the material proven to be defective, and PENETRON INTERNATIONAL, LTD shall in no case be liable otherwise or for incidental or consequential damages. PENETRON INTERNATIONAL, LTD. MAKES NO WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED. User shall determine the suitability of the product for its intended use and assume all risks and liability in connection therewith.